

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number  
**WO 2005/007869 A2**

(51) International Patent Classification<sup>7</sup>: C12Q WI 53528 (US). CHEHAK, LuAnne [US/US]; 4430 Saratoga Drive, Janesville, WI 53546 (US).

(21) International Application Number:

PCT/US2004/023014

(74) Agents: BROW, Mary, Ann, D. et al.; Medlen & Carroll, LLP, 101 Howard Street, Suite 350, San Francisco, CA 94105 (US).

(22) International Filing Date: 9 July 2004 (09.07.2004)

English

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:  
60/486,273 10 July 2003 (10.07.2003) US  
60/535,747 12 January 2004 (12.01.2004) US

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US): THIRD WAVE TECHNOLOGIES, INC. [US/US]; 502 South Rosa Road, Madison, WI 53719-1256 (US).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

BEST AVAILABLE COPY



A2

WO 2005/007869 A2

(54) Title: ASSAYS FOR THE DIRECT MEASUREMENT OF GENE DOSAGE

(57) Abstract: The present invention relates to compositions, methods, and kits for quantifying variations in gene copy number, e.g., of individual genes or of chromosomes or portions of chromosomes in an homogeneous reaction, without the need for target amplification, fragment size resolution, or microscopy.